

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

DENTSPLY INTERNATIONAL INC. : CIVIL ACTION NO. 1:04-CV-0348
and DENTSPLY RESEARCH & : :
DEVELOPMENT CORP., : (Judge Conner)

Plaintiffs

V.

HU-FRIEDY MFG. CO., INC.,

Defendant

MEMORANDUM

Presently before the court is a motion by defendant, Hu-Friedy Manufacturing Company, Inc. (“Hu-Friedy”), for summary judgment on the patent infringement claims of plaintiffs, Dentsply International Inc. and Dentsply Research and Development Corp. (collectively “Dentsply”). The patent at issue describes a method of manufacturing a “tip” that, when connected to a source device, vibrates and expels a small stream of liquid to facilitate dental cleaning. The court previously construed the term “tip” to mean “a separate elongated attachment.”¹ Hu-Friedy argues that its design cannot be found to infringe on this claim because the “tip region” of its tool is not a “separate” piece, but is an “integral” component of the tool. The court disagrees.

There is no question that the “tip region” of the Hu-Friedy device does not literally infringe on the “tip” of the Dentsply patent, as that term has been

¹ A more extensive discussion of this holding is presented in the court's previous decision (Doc. 59), familiarity with which is presumed.

construed in this case.² Nevertheless, even if an accused product does not fall within the express language of a patent claim, infringement may still be found under the “doctrine of equivalents.” Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29, 33-36 (1997). This doctrine contemplates coverage of designs not literally outlined in the claim language but implicitly encompassed within the patent’s scope. See id. (citing Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608-09 (1950)). Equivalence may be found when the “claimed limitation and the accused product perform substantially the same function in substantially the same way to obtain substantially the same result.” V-Formation, Inc. v. Benetton Group SpA, 401 F.3d 1307, 1313 (Fed. Cir. 2005); see also Warner-Jenkinson, 520 U.S. at 33-36; Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co., 285 F.3d 1046, 1052-55 (Fed. Cir. 2002) (en banc).

Application of the doctrine is necessarily restricted. It cannot be “used to erase ‘meaningful structural and functional limitations of the claim on which the public is entitled to rely in avoiding infringement.’” Conopco, Inc. v. May Dep’t Stores Co., 46 F.3d 1556, 1562 (Fed. Cir. 1994) (quoting Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 935 (Fed. Cir. 1987) (en banc)). Each essential element of the claim must appear, in some form, in the accused device. See Tronzo v. Biomet, Inc., 156 F.3d 1154, 1160 (Fed. Cir. 1998) (citing Warner-Jenkinson, 520 U.S. at 29). If a finding of equivalency would effectively eliminate a “meaningful”

² Dentsply concedes this point in its submissions in opposition to the motion for summary judgment. (Doc. 83 ¶¶ 8-9).

limitation of the patented design, the doctrine cannot apply.³ See Conopco, 46 F.3d at 1562; see also Warner-Jenkinson, 520 U.S. at 29, 33-36.

A finding of equivalency in this case would not eliminate an essential limitation of the Dentsply patent. The “tip” of the patented design—the element at issue here—is an elongated metal shaft through which a fluid passageway is drilled.⁴ The tip is then attached to a “connecting body” by “threads, press fit, soldering, brazing[,] or welding.” U.S. Patent No. 6,494,714 col. 14 (issued Dec. 17, 2002). The connecting body serves as a conductor of fluid and a moderator of ultrasonic vibrations produced by a source device. These vibrations are transferred through the metal tip, which may be used to scour the surface of a tooth while the fluid stream cools and cleans the affected area. Id.

Although the patent claim contemplates that the “tip” will be a separate component, this limitation is not “meaningful” to the patented design. Once formed, the tip is to be permanently affixed to a connecting body, and is to be used solely as a part of the overall cleaning device. See id. Whether or not the tip is a

³ See also Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1424 (Fed. Cir. 1997) (“A claim element is equivalently present in an accused device if only ‘insubstantial differences’ distinguish the missing claim element from the corresponding aspects of the accused device.”) (quoting Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1517-18 (Fed. Cir. 1995) (en banc), rev’d on other grounds, 520 U.S. 17 (1997)).

⁴ This discussion proceeds, as it must in the context of a defense motion for summary judgment, under a view of the evidence most favorable to plaintiffs. See Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 290 F. Supp. 2d 508, 518 (M.D. Pa. 2003) (“In resolving a motion for summary judgment, courts should . . . ‘consider all evidence in the light most favorable to the non-moving party’ . . .”).

“separate” component at the start of the manufacturing process, it is eventually merged into the overall design. It is thereafter an “integral” aspect of the device.

The sole reason for the “separate” limitation of the claims appears to be manufacturing expediency.⁵ The claims of the patent instruct that a fluid passageway should be drilled through the metal shaft, with an outlet in the end of the shaft that will attach to the connecting body. See id. The simplest means to produce this passageway is to drill through the tip while it is separated from the connecting body, and then to attach the tip to the body itself. Although this passageway *could* be formed by drilling through the tip when it is already attached to a connecting body, this would seem to be a more difficult method of production—without any clear benefits—and plausibly would not be contemplated by one “skilled in the art.” See Warner-Jenkinson, 520 U.S. at 33-36; Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1424-26 (Fed. Cir. 1997); see also Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 114 F.3d 1161, 1163-64 (Fed. Cir. 1997).⁶ Nevertheless, this is the method that Hu-Friedy employs.⁷

The integrated “tip region” of the Hu-Friedy device and the separate “tip” of the Dentsply patent arguably function in the same manner and serve the same

⁵ See supra note 4 (stating standard of review).

⁶ Cf. Johnson, 285 F.3d at 1056-59 (Rader, J., concurring) (discussing alternative “foreseeability” test for non-textual infringement).

⁷ Cf. Sage, 126 F.3d at 1424 (“The doctrine of equivalents prevents an accused infringer from avoiding infringement by changing only minor or insubstantial details of a claimed invention while retaining their essential functionality.”).

purpose. Both are permanently affixed to the connecting body. Both transmit ultrasonic vibrations and fluid from that body. Both allow the user to contact and clean tooth surfaces effectively. The separateness element of the Dentsply patent is nothing more than an implicit recognition of a simpler manufacturing technique. It is not a meaningful claim limitation and does not preclude application of the doctrine of equivalents.⁸ See Warner-Jenkinson, 520 U.S. at 33-36; Sage, 126 F.3d at 1424-26; see also Hilton, 114 F.3d at 1163-64; Conopco, 46 F.3d at 1562.

Whether the “tip” and “tip region” of the designs at issue are sufficiently equivalent to establish infringement is a question of fact that must be reserved for trial. See id.; see also Graver, 339 U.S. at 608-09, cited with approval in Warner-Jenkinson, 520 U.S. at 33-36. The motion for summary judgment will be denied. See FED. R. CIV. P. 56.

An appropriate order will issue.

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge

Dated: April 20, 2005

⁸ See supra note 4 (stating standard of review).

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DENTSPLY INTERNATIONAL INC.	:	CIVIL ACTION NO. 1:04-CV-0348
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DEVELOPMENT CORP.,	:	(Judge Conner)
	:	
Plaintiffs	:	
	:	
v.	:	
	:	
HU-FRIEDY MFG. CO., INC.,	:	
	:	
Defendant	:	

ORDER

AND NOW, this 20th day of April, 2005, upon consideration of defendant's motion for summary judgment (Doc. 77), and for the reasons set forth in the accompanying memorandum, it is hereby ORDERED that the motion (Doc. 77) is DENIED.

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge